



Atty Dkt No. 8325-0012

COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231FORM PTO-1449 (Modified)  
LIST OF PATENTS AND PUBLICATIONS  
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT  
(Use several sheets if necessary)  
Sheet 1 of 4

#7/I.D.S.

In the Application of RASCHKE et al.

Serial No.: 09/844,662

Art Unit: ~~1645~~ 1653

Filed: April 27, 2001

Examiner: ~~unassigned~~ W4x

Title: METHODS FOR BINDING EXOGENOUS MOLECULE TO CELLULAR CHROMATIN

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MAY 15 2002  
TC 1700

## U.S. PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Date	Name	Class	Sub Class	Filing Date
AW	AA-1	5,789,538	August 4, 1998	Rebar et al.	530	324	
AW	AB-1	6,007,988	December 28, 1999	Choo et al.	435	6	
AW	AC-1	6,013,453	January 11, 2000	Choo et al.	435	6	

## FOREIGN PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Publication Date	Country or Patent Office	Class	Sub Class	Translation YES NO
AW	AD-1	WO 95/19431	July 20, 1995	PCT	—	—	
AW	AE-1	WO 98/54311	December 3, 1998	PCT	—	—	
AW	AF-1	WO 01/68807	September 20, 2001	PCT	—	—	

## OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Exam. Init.	Ref. Desig.	Description
AW	AG-1	Aparicio et al., "Characterization of Proteins Bound to Chromatin by Immunoprecipitation from Whole-Cell Extracts," <i>Current Protocols in Molecular Biology</i> (suppl 47): 21.3.1-12

Examiner: *Pat AW*

Date Considered: 7/19/04

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP609. Draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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In the Application of RASCHKE et al.

Serial No.: 09/844,662

Art Unit: ~~1045~~ 1453

Filed: April 27, 2001

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Exam. Init.	Ref. Desig.	Description
<u>UPW</u>	AH-1	Beerli et al., "Positive and Negative Regulation of Endogenous Genes by Designed Transcription Factors," <i>Proc. Natl. Acad. Sci. U.S.A.</i> <u>97</u> :1495-1500 (2000) ✓
<u>UPW</u>	AI-1	Beerli et al., "Toward Controlling Gene Expression at Will: Specific Regulation of <i>erbB-2/HER-2</i> Promoter by Using polydactyl Zinc Finger Proteins Constructed from Modular Building Blocks," <i>Proc. Natl. Acad. Sci. U.S.A.</i> <u>95</u> :14628-14633 (1998) ✓
<u>UPW</u>	AJ-1	Boyd et al., "Myc Versus USF: Discrimination at the <i>cad</i> Gene is Determined by Core Promoter Elements," <i>Molecular Cellular Biology</i> <u>17</u> (5):2529-2537 (1997) ✓
<u>UPW</u>	AK-1	Boyd et al., "c-Myc Target Gene Specificity is Determined by a Post-DNA-Binding Mechanism," <i>PNAS</i> <u>95</u> :13,887-13,892 (1998) ✓
<u>UPW</u>	AL-1	Choo et al., "Toward a Code for the Interactions of Zinc Fingers with DNA: Selection of Randomized Fingers Displayed on Phage," <i>Proc. Natl. Acad. Sci. U.S.A.</i> <u>91</u> :11163-11167 (1994) ✓
<u>UPW</u>	AM-1	Choo et al., "In Vivo Repression by a Site-Specific DNA-Binding Protein Designed Against an Oncogenic Sequence," <i>Nature</i> <u>372</u> :642-645 (1994) ✓
<u>UPW</u>	AN-1	Greisman et al., "A General Strategy for Selecting High-Affinity Zinc Finger Proteins for Diverse DNA Target Sites," <i>Science</i> <u>275</u> :657-661 (1997) ✓
<del>UPW</del>	<del>AQ-1</del>	<del>Hayes, J. J., "Chemical Probes of DNA Structure in Chromatin," <i>Current Biology</i> <u>2</u>:127-135 (1995)</del>
<u>UPW</u>	AP-1	Hebbes et al., "Core Histone Hyperacetylation Co-Maps with Generalized DNase I Sensitivity in the Chicken $\beta$ -Globin Chromosomal Domain," <i>The EMBO Journal</i> <u>13</u> (8):1823-1830 (1994) ✓

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In the Application of RASCHKE et al.

Serial No.: 09/844,662

Art Unit: 1645

Filed: April 27, 2001

Examiner: unassigned

Title: METHODS FOR BINDING EXOGENOUS MOLECULE TO CELLULAR CHROMATIN

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Exam. Init.	Ref. Desig.	Description
<i>AP</i>	AQ-1	Jamieson et al., "In Vitro Selection of Zinc Fingers with Altered DNA-Binding Specificity," <i>Biochemistry</i> <u>33</u> :5689-5695 (1994)
<i>AP</i>	AR-1	Kang et al., "Zinc Finger Proteins as Designer Transcription Factors," <i>The Journal of Biological Chemistry</i> <u>275</u> (12):8742-8748 (2000)
<i>AP</i>	AS-1	Kuo et al., "In Vivo Cross-Linking and Immunoprecipitation for Studying Dynamic Protein:DNA Associations in a Chromatin Environment," <i>Methods</i> <u>19</u> :425-433 (1999)
<i>AP</i>	AT-1	Liu et al., "Design of Polydactyl Zinc-Finger Proteins for Unique Addressing Within Complex Genomes," <i>Proc. Natl. Acad. Sci. U.S.A.</i> <u>94</u> :5525-5530 (1997)
<i>AP</i>	AU-1	Livingstone-Zatchej et al., "Mapping of Nucleosome Positions in Yeast", <i>Methods in Molecular Biology</i> , <u>119</u> : pp 363-378 Chromatin Protocols, P.B. Becker, ed., Humana Press, (1999)
<i>AP</i>	AV-1	O'Neill et al., "Immunoprecipitation of Chromatin," <i>Meth. Enzymol.</i> <u>274</u> :189-197 (1996)
<i>AP</i>	AW-1	Pomerantz et al., "Structure-Based Design of Transcription Factors," <i>Science</i> <u>267</u> :93-96 (1995)
<i>AP</i>	AX-1	Rebar et al., "Zinc Finger Phage: Affinity Selection of Fingers with New DNA-Binding Specificities," <i>Science</i> <u>263</u> :671-673 (1994)
<i>AP</i>	AY-1	Sippel et al., "Identification of cis-Acting Elements as DNase I Hypersensitive Sites in Lysozyme Gene Chromatin," <i>Meth. Enzymol.</i> <u>274</u> :233-246 (1996)
<i>AP</i>	AZ-1	Tullius et al., "Hydroxyl Radical Footprinting: A High-Resolution Method for Mapping Protein-DNA Contacts," <i>Meth. Enzymol.</i> , <u>155</u> :537-558 (1987)

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In the Application of RASCHKE et al.

Serial No.: 09/844,662

Art Unit: ~~1645~~ 1653

Filed: April 27, 2001

Examiner: ~~unassigned~~ Wkx

Title: METHODS FOR BINDING EXOGENOUS MOLECULE TO CELLULAR CHROMATIN

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Exam. Init.	Ref. Desig.	Description
<i>Wkx</i>	BA-1	van Steensel et al., <i>Nature Biotechnology</i> , <u>18</u> :424-428 (2000)
<i>Wkx</i>	BB-1	Wellinger et al., <i>Methods in Molecular Biology</i> , <u>119</u> :Chromatin Protocols, P.B. Becker, ed., Humana Press, pp.161-173
<i>Wkx</i>	BC-1	Wolffe, "Chromatin: Structure and Function" 3 <sup>rd</sup> Ed. Academic Press, San Diego (1998)

Examiner: *[Signature]*

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TECH CENTER 1600/2900

In the Application of RASCHKE et al.

Serial No.: 09/844,662

Art Unit: ~~1645~~ 1653

Filed: April 27, 2001

Examiner: ~~unassigned~~ *Wax*

Title: METHODS FOR DESIGNING EXOGENOUS REGULATORY MOLECULES

U.S. PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Date	Name	Class	Sub Class	Filing Date
	AA-2						

FOREIGN PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Publication Date	Country or Patent Office	Class	Sub Class	Translation YES NO
<i>MP</i>	AB-2	WO 00/42219	July 20, 2000	PCT			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Exam. Init.	Ref. Desig.	Description
<i>MP</i>	AC-2	Aoki et al., "RP58 Associates with Condensed Chromatin and Mediates a Sequence-specific Transcriptional Repression," <i>J. Biol. Chem.</i> 273(41):26698-26704 (1998) ✓
<i>MP</i>	AD-2	Complete Control, "Inducible Mammalian Expression System, Instruction Manual Stratagene Catalog # 271460, #217461, and #217468 pp.1-22 ✓
<i>MP</i>	AE-2	Gregory et al., "Restriction Nucleases as Probes for Chromatin Structure," <i>Methods Mol. Biol.</i> 119:417-425 (1999) ✓

Examiner: *[Signature]*

Date Considered: 7/19/04

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP609. Draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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Title: METHODS FOR DESIGNING EXOGENOUS REGULATORY MOLECULES

Exam. Init.	Ref. Desig.	Description
<i>MPW</i>	AF-2	Gross & Garrard, "Nuclease Hypersensitive Sites in Chromatin," <i>Annual Review of Biochemistry</i> <u>57</u> :159-197 (1988) ✓
<i>MPW</i>	AG-2	Hertzberg et al., "Cleavage of DNA with Methidiumpropyl-EDTA-Iron(III): Reaction Conditions and Product Analyses," <i>Biochemistry</i> <u>23</u> :3934-3945 (1984) ✓
<i>MPW</i>	AH-2	Mucha et al., "Nuclease-Hypersensitive Chromatin Formed by a CpG Island in Human DNA Cloned as an Artificial Chromosome in Yeast," <i>J. Biol. Chem.</i> <u>275</u> (2):1275-1278 (2000) ✓
<i>MPW</i>	AI-2	Payre et al., "Genomic Targets of the Serendipity $\beta$ and $\delta$ Zinc Finger Proteins and Their Respective DNA Recognition Sites," <i>EMBO Journal</i> <u>10</u> (9):2533-2541 (1991) ✓
<i>MPW</i>	AJ-2	Sambrook et al., <i>Molecular Cloning: A Laboratory Manual</i> . Vol. 1-3, 2 <sup>nd</sup> edition, Published 1989, Cold Spring Harbor Laboratory Press; see pp 13.21-13.33 ✓
<i>MPW</i>	AK-2	Simpson, "In vivo Methods to Analyze Chromatin Structure," <i>Current Opinions in Genetics &amp; Development</i> <u>9</u> :225-229 (1999) ✓
<i>MPW</i>	AL-2	Stewart et al., "A Simpler and Better Method to Cleave Chromatin with Dnase 1 for Hypersensitive Site Analyses," <i>Nuc. Acids Res.</i> <u>19</u> (11):3157 (1991) ✓
<i>MPW</i>	AM-2	Wingender et al., "TRANSFAC: An Integrated System for Gene Expression Regulation," <i>Nuc. Acids Res.</i> <u>28</u> (1):316-319 (2000) ✓

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<i>MP</i>	AA-3	5,306,619	April 26, 1994	Edwards et al.	435	6	
<i>MP</i>	AB-3	6,410,248	June 25, 2002	Greisman et al.	435	7.2	

FOREIGN PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Publication Date	Country or Patent Office	Class	Sub Class	Translation YES	NO
<i>MP</i>	AC-3	WO 98/53057	November 26, 1998	PCT	—	—		
<i>MP</i>	AD-3	WO 99/48909	September 30, 1999	PCT	—	—		

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Exam. Init.	Ref. Desig.	Description
<i>MP</i>	AE-3	Hayes et al., "Chemical Probes of DNA Structure in Chromatin," <i>Chemistry &amp; Biology</i> 2:127-135 (1995) (corrected)
<i>MP</i>	AF-3	Liu et al., "Regulation of an Endogenous Locus Using a Panel of Designed Zinc Finger Proteins Targeted to Accessible Chromatin Regions Activation of Vascular Endothelial Growth Factor A," <i>Journal of Biological Chemistry</i> 276(14):11323-11337 (2001)
<i>MP</i>	AG-3	Zhang et al., "Synthetic Zinc Finger Transcription Factor Action at an Endogenous Chromosomal Site. Activation of the Human Erythropoietin Gene," <i>Journal of Biological Chemistry</i> 272(43):33850-33860 (2000)

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